ABSTRACT OF THE DISCLOSURE

There are here disclosed a photoresist material for lithography using a light of 220 nm or less which comprises at least a polymer represented by the following formula (2) and a photo-acid generator for generating an acid by exposure:

wherein R^1 , R^2 , R^3 and R^5 are each a hydrogen atom or a methyl group; R^4 is an acid-labile group, an alicyclic hydrocarbon group having 7 to 13 carbon atoms, which has an acid labile group, an alicyclic hydrocarbon group having 7 to 13 carbon atoms, which has a carboxyl group, or a hydrocarbon group having 3 to 13 carbon atoms, which has an epoxy group; R^6 is a hydrogen atom, a hydrocarbon group having 1 to 12 carbon atoms, or an alicyclic hydrocarbon group having 7 to 13 carbon atoms, which has a carboxyl group; x, y and z are optional values which meet x + y + z = 1, $0 < x \le 1$, $0 \le y < 1$ and $0 \le z < 1$; and a weight-average molecular weight of the polymer is

in the range of 2000 to 200000, and a resin having a (meth)acrylate unit of an alicyclic lactone structure represented by the formula (3):

$$-CH_{2} - CH_{2} - CH_{2} - CH_{3} - CH_{2} - CH_{3} -$$

wherein R⁸ is a hydrogen atom or a methyl group, and R⁹ is a hydrocarbon group of 7 to 16 carbon atoms having an alicyclic lactone structure.